

**Title:** Dataset Analysis Report — Titanic Dataset

**Dataset Name:** Titanic Dataset

**Number of Records:** 891 rows and 12 columns

**Objective:** Predict whether a passenger survived or not.

### Data Types

Feature Type	Examples
Numerical	Age, Fare, SibSp
Categorical	Sex, Embarked
Ordinal	Pclass
Binary	Survived

### Target Variable

- Survived is the target variable (0 = No, 1 = Yes).

### Missing Values

- Age and Cabin contain missing values.
- Age can be filled with mean/median.
- Cabin can be dropped due to high missing percentage.

### Class Balance

- Survived has imbalance: more passengers did not survive than survived

### ML Suitability

- Dataset size is sufficient for basic machine learning.
- Contains both numerical and categorical data.
- Needs preprocessing (handling missing values, encoding categorical variables).

### Conclusion

The Titanic dataset is suitable for machine learning after preprocessing such as handling missing values, encoding categorical features, and balancing classes.